

# The Philosophical Foundations of the Emergence and Development of the Concept of Inter-Organizational Cooperation Practices: Literary Review

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**How to cite this paper:** Ibraheem, H. K., & Mhaibes, H. A. (2025). The Philosophical Foundations of the Emergence and Development of the Concept of Inter-Organizational Cooperation Practices: Literary Review. *Open Journal of Social Sciences*, 13, 501-519.

<https://doi.org/10.4236/jss.2025.138033>

**Received:** July 8, 2025

**Accepted:** August 19, 2025

**Published:** August 22, 2025

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## Abstract

This paper presents a literature review on the concept of cooperation, tracing its development through three stages: biological/genetic, societal, and internal. Using a descriptive and historical analysis of the available literature, the study argues that cooperation is an essential process for addressing resource scarcity and ensuring sustainability. The review concludes that, despite the importance of cooperation, it lacks a single, agreed-upon definition within the organizational context. This is largely due to the diversity of fields and objectives pursued by previous studies, the differing perspectives of researchers, and the diversity of their cultures. Furthermore, inter-organizational cooperation goes through three evolutionary stages, beginning with the individual's biological makeup, which includes genetic genes that motivate and encourage individuals toward responsibility toward others and society. This, in turn, enhances society's ability to cooperate with organizations and improves its potential and collaborative capabilities with other organizations, or vice versa, its need for community cooperation or cooperation with other organizations.

## Keywords

Philosophy of Cooperation, Inter-Organizational Cooperation, Stages of Cooperation Development

## 1. Introduction

In the contemporary period, organizations have seen a transition in theory and practice towards acknowledging the significance of organizational cooperation in

addressing intricate issues associated with government governance and service delivery. Conventional public administration frameworks have been adapted to include more flexible partnership, contracting, and incentive models, emphasizing “horizontal” decentralized coordination. The majority of cooperation literature from the 1980s and 1990s concentrated on advocating for a collaborative methodology to alleviate tensions and address intricate issues, and to confront potential crises. The main questions of the research problem: What is the concept of organizational cooperation? And what are the stages of its development, as an option to solve the problems of declining organizational resources and meet the requirements of society, as noted by [Head \(2013\)](#)? Cooperation is a complex concept; however, it has the capacity to integrate and unify disparate systems for diverse social and economic objectives and interests. The word collaboration serves as an umbrella designation for partnerships among persons or organizations, complicating the establishment of a conceptually coherent definition across several disciplines ([Gajda, 2004](#)). Cooperation manifests as work teams or groups that engage collaboratively to consistently provide mutual support and prioritize the collective welfare, facilitated by the rivalry among people and organizations ([Nowak, 2012](#)). Social interactions were categorized into four types: reciprocity, altruism, selfishness, and malice ([Khamis et al., 2006](#)). Numerous academic areas have examined the notion of cooperation from various viewpoints, including social psychology, genetics, mathematics, game theory, linguistics, economics, politics, and philosophy throughout its diverse cognitive domains ([Clemmer et al., 1998](#)). Cooperation, as defined by Webster’s Dictionary, signifies “collaborating with others.” Generally, it pertains to the manner in which people and organizations see their interconnectedness to fulfill their self-interests ([West et al., 2008](#)). Through collaborative efforts, whether coerced, willingly selected, or inadvertently. Individuals and organizations may collaborate while mostly disregarding their own self-interests. Examples include the collaboration of troops in military conflicts, families, educational institutions, jails, and, more broadly, any entity or organization to which people belong (voluntarily, legally, or coercively) ([Georgé et al., 2011](#)). Philosophical contributions to the area of cooperation include rationalist philosophy, “practical” pragmatism, and moral philosophy. Rationality examines the essential inquiry of cooperation: “What is the crucial element?” This text presents a fundamental examination of cooperation principles, emphasizing methods of collaboration, the significance of its results, and the assessment of cooperative efficacy. Rationality entails the use of logical conduct, characterized by the formulation of intelligent principles and judgments that provide favorable consequences for everybody, contingent upon the time and energy expended. Pragmatism, conversely, focuses on practical results by addressing the question, “What is effective in practical collaboration?” What is exempt? What are the ramifications of collaboration? Evaluating the objectives, intentions, and principles of stakeholders. The ethical philosophy of cooperation emphasizes the ethical norms and ideals of the collective. For instance, mutual respect (“All voices must be acknowledged, and all should engage in active listening”), commitment (“We

function as a cohesive unit, collaborating, and once united, I have resolved that mutual support is paramount”), transparency (“We do not conceal information; instead, we engage in open and honest communication”), and shared leadership (“We collectively assume responsibility”). Clearly allocating responsibilities through cooperation significantly influences the decision-making process of policy actors in collective action (Huang et al., 2025). The primary focus will be the philosophical dimension of organizational cooperation, examining the cognitive contributions of scholars in administrative sciences to its definition, and delineating the phases of the emergence and evolution of cooperative practices among individuals, groups, and organizations. The results of a study (Gao, 2025) reveal that collaboration requires a supportive organizational and technological environment characterized by sustained leadership, comprehensive planning, active stakeholder engagement, strong communication mechanisms, and a commitment to continuous learning. Most importantly, collaboration and genuine participation from all stakeholders are key to success. Cooperation has many areas, including economic development, which is a process of interaction between multiple organizations with the aim of addressing economic development problems that cannot be solved by individual organizations (Chen, 2022). Therefore, rational thinking at the individual level leads to cooperative behavior toward individuals or the organization, and benefits everyone if it is effective and efficient through choosing the best cooperative methods and approaches to achieve high-quality results for all parties. This can only be achieved through ethical values that lead to mutual respect, commitment to agreements and covenants, and providing support and assistance in working together. This is emphasized by (Clemmer et al., 1998), who discusses that cooperation can be a smart strategy based on rational thinking, and a process for achieving personal and organizational goals, motivated by personal interests or self-interest, and by applying ethical principles that govern individuals and organizations’ interactions with one another within an interconnected system, improving systems and their ability to meet challenges. Therefore, many intellectual disciplines have focused on cooperation and made it a subject of study. These disciplines include social psychology, genetics, biology, linguistics, operations research, economics, moral philosophy and rationality, and pragmatism across three developmental stages: 1) the biological development of the individual that motivates and drives 2) societal cooperation that influences 3) organizational cooperation within and outside organizations, engaging all who share a common goal and encouraging diverse viewpoints, negotiating agreement, and insisting on fairness and justice in the application of rules.

## 2. Research Methodology

Organizations in general have become in need of establishing joint cooperation among themselves, as a result of the dwindling resources and the weak level of their efficiency, especially with regard to raw materials and the smart skills of employees. This is due to the increasing needs of society and the diversity of its desires, and the increasing number of organizations producing goods and services,

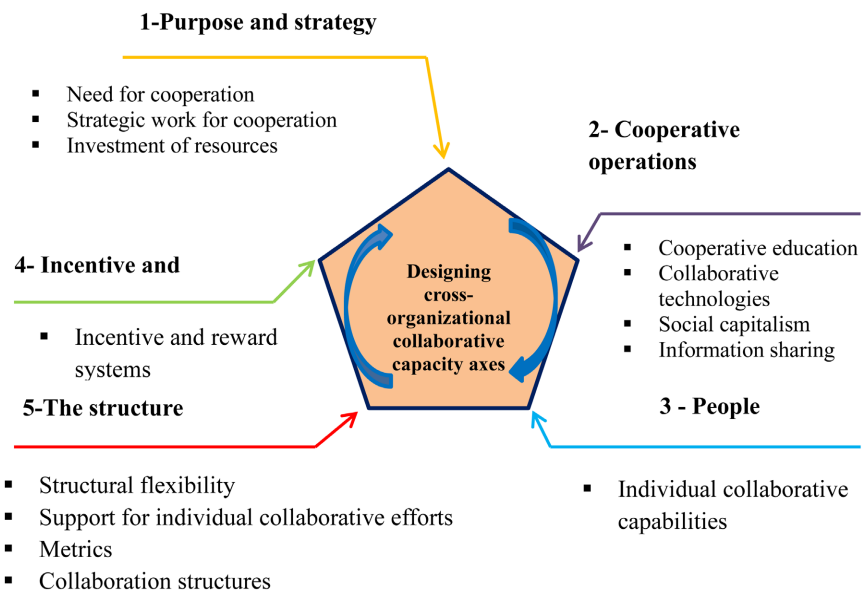
through the technological factor and artificial intelligence. Therefore, it has become necessary to search for a strategic option that enhances their continuity in productive work for the longest possible period. Cooperation among them is the best option to solve the problem of depletion and dwindling resources, and to confront potential crises. The importance of the research emerged in understanding the concept of organizational cooperation from multiple viewpoints of researchers, identifying the philosophical and cognitive foundations that contributed to the development of the concept of cooperation and its practices in the internal and external environment of the organization, and focusing on the positive results that cooperation between organizations can achieve. While the importance of the research focused on the level of impact of positive cooperative relationships that contribute to improving the level of productivity, reducing operating costs, and increasing organizational capabilities in facing crises through interaction and mutual harmony between organizations, and improving the level of creative capabilities in changing methods and approaches of work and keeping pace with modernity, thus organizational cooperation works as a safety valve in overcoming all difficulties that organizations may face. The historical survey approach was adopted to trace the cultural and intellectual history of cooperation. The central questions of the historical approach are: “On what cultural and intellectual traditions is cooperation based?”, “From what origins did it develop?”, and “How does cooperation vary across regions and cultures?” In addition, the intellectual efforts of numerous writers and researchers in the social sciences (Marsh, 2025) related to organizational cooperation based on mutual understanding and voluntary sharing of resources and facing crises were examined. (Randrup et al., 2018). A logical analysis of the theoretical concepts and proposals was then formulated and discussed in accordance with the needs and requirements of contemporary public organizations. The review literature was obtained through databases (Scopus, Google Scholar, ResearchGate, WebScience, and the Chinese Journal of Public Administration Review), and the most important reviews that dealt with cooperation between public administration organizations from different perspectives, written during the period from 1991 to 2025, were adopted.

### **3. Literature Review and Hypothesis Development**

#### **3.1. The Emergence of the Concept of Organizational Cooperation**

The term inter-organizational cooperation for development emerged (Cross et al., 2000). They defined cooperation as “relationships that provide opportunities for mutual benefits and outcomes beyond what any organization or sector could achieve independently” (Austin, 2000). To offset the deficiencies of one party with the strengths of the other, all parties collaborate to attain their objectives (Lurie, 2016). “Cooperation” may stem from “altruistic” action, with both phrases indicative of moral virtue. The term “cooperation” denotes actions where one person incurs a cost while another gains a benefit, but “altruism” describes a specific category of cooperative behaviors driven by goodwill or affection for others. The be-

behavioral and psychological dimensions converge inside the individual (Almenberg et al., 2013). Which influences the extent of collaboration among people inside companies, as well as between organizations that often refrain from cooperation until they are unable to attain their objectives independently, therefore resorting to collaboration (Harangozó & Zilahy, 2015). Leadership also has an influential role in supporting cooperative relations when it exercises its paternal role in consolidating the internal environment, which is positively reflected in dealing with other or similar organizations (Salih & Salih, 2021), Therefore, leadership cooperation will contribute to building the organization's dynamic capabilities by encouraging the exchange of experiences and skills, which will help in achieving creativity and collaborative innovation (Ibraheem & Mhaibes, 2025). Therefore, it requires senior leadership to align the elements of the organizational environment with the capabilities existing within and outside the organization to create effective organizational cooperation, alongside the establishment of a mechanism to assess the various factors influencing the organization's capacity to cooperate with other entities. Cooperative capabilities have five fundamental components: goal and strategy, cooperative processes, personnel, rewards and incentives, and the organizational framework for collaboration. Each organizational component has distinct requirements, as seen in **Figure 1**.



Source: Jansen et al. (2008).

**Figure 1.** Requirements for elements of cooperation between organizations.

The aforementioned indicates that the notion of organizational collaboration encompasses several interpretations and diverse work situations, contingent upon the nature of activities and practical specializations within the organizational milieu. Consequently, a compilation of perspectives from authors and scholars who have examined the notion of collaboration and its definition is shown in **Table 1**.

**Table 1.** Definitions of organizational cooperation.

Seq.	The researcher and year	Definition of cooperation
1	(Wood & Gray, 1991)	A consensus procedure involving many organizations centered on a vision encompassing various facets of an issue that necessitates solutions extending beyond their constrained perspectives of feasibility.
2	(Unit, 2000)	Mutual benefit refers to a partnership among two or more parties collaborating towards shared objectives by distributing responsibility, authority, and accountability to attain collective outcomes.
3	(Mankin et al., 2004)	Processes that need extensive knowledge and include communication, coordination, negotiation, and collaborative research or development among several individuals, both inside and outside the company, to execute tasks with shared characteristics.
4	(Khamis et al., 2006)	A collaborative endeavor involving two or more participants who work together to attain shared aims.
5	(Bengtsson et al., 2010)	It is a system of agents whose interactions are based on a partial alignment of objectives and interests.
6	(Georgé et al., 2011)	Collaborating with one or more others to attain a consensus in action, effort, or influence.
7	(Rand & Nowak, 2013)	It is a collaborative endeavor by two or more entities to attain a shared objective.
8	(Norris-Tirrell & Clay, 2016)	“A procedure wherein stakeholders with a vested interest in an issue pursue a collaboratively accepted resolution.”
9	(Silvestre et al., 2018)	Collaborative ties among nations, organizations, entrepreneurs, industries, and social groupings to execute cooperative initiatives that fulfill individual or collective objectives.
10	(Castañer & Oliveira, 2020)	“The joint pursuit of agreed-upon goals among organizations.”
11	(Olsson, 2022)	Collaboration has been described as “mutually supportive interactions through which knowledge and skills are shared, mutual understandings are reached, and joint decisions are made.”
12	(Abou Amsha et al., 2023)	Individuals or groups who work together to create new knowledge, solutions, or innovations.

Source: Prepared by researchers based on previous sources.

The intellectual endeavors of authors and researchers in the domain of organizational collaboration have not reached a consensus on a definitive definition of the term. Their viewpoints have differed significantly, mostly focusing on the notion of collaborative actions and processes. These activities are conducted willingly or at the behest of others, with participation being discretionary. The objec-

tive is to attain collective or personal objectives, either temporarily or permanently, by social coordination among people, resulting in the establishment of formal links between groups.

### **3.2. Stages of Development of Organizational Cooperation**

The origins and characteristics of cooperative conduct in humans have posed a significant scientific challenge, driven by continuous study efforts. The birth and evolution of social psychology have concentrated on elucidating human cooperative conduct and examining the fundamental motivations for offering aid, whether by individuals, groups, or organizations (Bowles & Gintis, 2003). The genesis and evolution of collaboration may be elucidated via three fundamental phases, as shown below:

#### **3.2.1. The First Stage: The Establishment of Biological and Genetic Collaboration inside Human Cellular Structures**

This stage serves as the essential foundation for the establishment of cooperation, supported by several medical investigations focused on genetic cells, which have shown the biological collaboration of chromosomes in eukaryotic cells, as well as intercellular cooperation. The cooperative activity of tiny cells has intrigued evolutionary scientists for decades, revealing that such collaboration has beneficial physiological impacts on the human body. Individuals with cooperation between their somatic cells have the highest average fitness, while those with the lowest average fitness are observed due to these cells being solitary in their behavior, not interacting and being dissident from each other (Almenberg et al., 2013). These effects also include cases of people recovering from diseases as a result of the cooperation of the immune cells in the human body with each other to attack disease cells and foreign bodies. Therefore, these cells are called sentinel cells because they guard the body from any danger that enters the bloodstream and threatens human life. As a result of this cooperative behavior, what is known as the immune system is formed (Rahmani et al., 2016). Since the mid-1970s, researchers have been interested in studying and modeling the acquired genetic traits of human behavior by tracking the information individuals carry and how it can change over time and be transmitted across generations. Individuals can preferentially provide benefits to other cooperators. The closer the relationship between a beneficiary and another beneficiary, the more likely they are to inherit cooperative traits from a cooperating individual (Henrich & Muthukrishna, 2021). Carriers of the cooperative gene can offer support and cooperation to others directly without being asked, and can influence themselves by helping others (Gardner & Foster, 2008). An example of this is the financial sacrifices parents make to provide education and care for their children, as well as the search for food by birds over long distances and then regurgitating it for their young (West et al., 2008). Cooperative behavior can be acquired if selfish individuals (“ego”) are influenced by group members. This phenomenon persists and is disseminated from one individual to another. Experimental study has shown that an individual’s cooperative action for

the common benefit, when repeated, directly or indirectly influences others, leading to extensive cooperative contributions and fostering collective cooperation (Fowler & Christakis, 2009). Hamilton provided a comprehensive elucidation of the development of cooperation, asserting that any cooperative conduct is advantageous if it enhances mutual benefit and altruism among group members, regardless of whether the benefit is direct or indirect (Gardner & Foster, 2008). Socialization activities associated with a certain emotion significantly augment the culture of moral equivalence derived from a continuum of emotions common to all people. Each emotion has a distinct impact on cooperative conduct, which significantly differs throughout cultures. Consequently, those requiring collaboration must consider the cultural aspects of the members involved in every specific cooperative endeavor (Hammerstein, 2003). Some individuals have a selfish gene that makes them neglect to help their relatives, preferring to help strangers, and expecting to receive reciprocal help from those they help (West et al., 2008).

### 3.2.2. The Second Stage: The Development of Community Cooperation

Since the beginning of humankind's existence on Earth, humans have realized the impact of cooperation on the regularity of their lives. They lived in communities bound together by kinship ties. These communities began to develop and inhabit the same environment, but the areas of cooperation varied. Some cooperated only in war and hunting, and in building houses and performing collective rituals (Henrich & Muthukrishna, 2021). The idea of community cooperation, whose data are shown in Table 2, is primarily aimed at survival and the stability of daily life through hunting, food gathering, crop cultivation, and protecting the community from dangers. Cooperation among them is based on tasks such as land preparation, plowing, sowing, and irrigation in the field of agriculture, forming a joint and coordinated effort, whether undertaken by two or more people at the same time (West et al., 2008).

**Table 2.** Cooperation in non-industrial societies.

Seq.	Activity	Number of cases	Task differentiation 1 - 5	Specialization 1 - 5	joint effort 1 - 5
1	Plowing	9	1.22	1.55	0.61
2	Hunting	14	1.23	2.05	0.85
3	Fishing	20	1.04	2.10	0.50
4	Gathering Crops	12	3.85	2.31	0.11

Source: West et al. (2008).

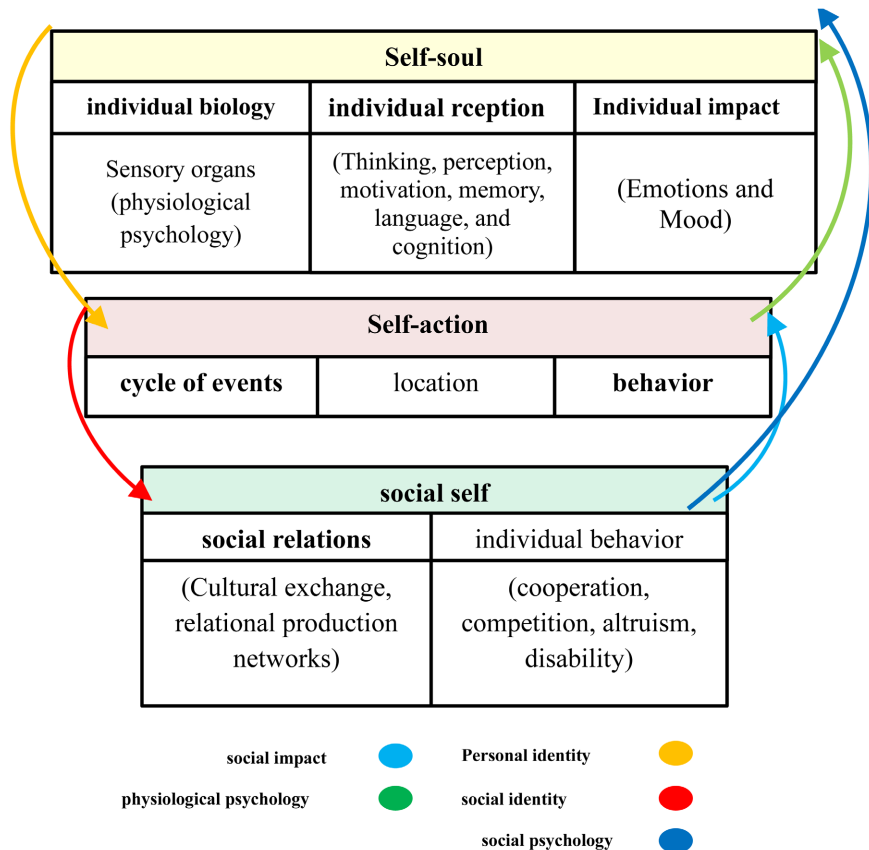
Despite the cooperative data in the table above, some researchers have noted that kin groups congregate not only for communication but also to compete for resources and share tangible benefits. Cooperative behavior may arise when one

individual motivates others based on their perceived proximity to others and the environment that brings them together (Jones et al., 2005). Most researchers concur that cooperative relationships can emerge through reciprocity, wherein “an interaction in which an individual cooperates for the first time will only sustain if the other individual also cooperates” (Boyd & Richerson, 1992; Buxmann & Konig, 2000). Similarly, the majority of scientific ideas about cooperative conduct in humans suggest that the genesis and evolution of cooperation occurred via family, reciprocity, reputation, social norms, and punitive measures. This is due to the presence of kinship in all human communities, which fosters psychological and behavioral biases favoring genetic relations, with a tendency to reciprocate based on the principle of mutual assistance: “If you assist me, I will assist you.” Or by the implementation of the reciprocal treatment technique (Henrich & Henrich, 2006). This resulted in the cultivation of cooperation between the individual and society, with swift cultural adaptability to the social milieu, which fostered the proliferation of behaviors that augment competition in the realm of assistance. Factors that enhance an individual’s reputation, hence increasing the likelihood of receiving future support (Jones et al., 2005; Boyd & Richerson, 1992). Social psychology posits that social relationships emerge when an individual’s psychological state is influenced by the interplay of biological factors, particularly sensory organs, which shape perceptions related to cognition, motivation, memory, language, and knowledge. This interaction engenders a psychological self that manifests through behaviors, situational contexts, and life events. Consequently, the effects of these self-actions are conveyed to the social self, which encompasses behaviors such as cooperation, altruism, competition, and obstruction, as well as social relationships fostered through cultural exchange and relational production networks. The social self, in turn, bolsters self-activity and the self-concept, so establishing a framework for individual and social conduct that engages in a cohesive cycle of action and relational impact. This can be explained through the following **Figure 2**.

The degree of cooperation among human societies is influenced by various factors, including disparities in the magnitude and intensity of cooperation, the diversity of cooperative domains across societies, the escalating scale and intensity of human activities, the prevalence of uncooperative societies that struggle to adapt, and social behaviors that seek to punish and retaliate against others’ actions (Chudek et al., 2013).

### **3.2.3. Third Stage: The Development of Cooperation at the Organizational Level**

The practical beginnings of interorganizational collaboration may be traced to the historical period that initiated the first industrial revolution in Britain, marked by the invention of the steam engine in the 1760s by Thomas Savery. This breakthrough precipitated a rapid industrial expansion, especially in the textile and steel sectors, subsequently proliferating throughout Europe and North America in the early 19<sup>th</sup> century. The Second Industrial Revolution, or Technological



Source: West et al. (2008).

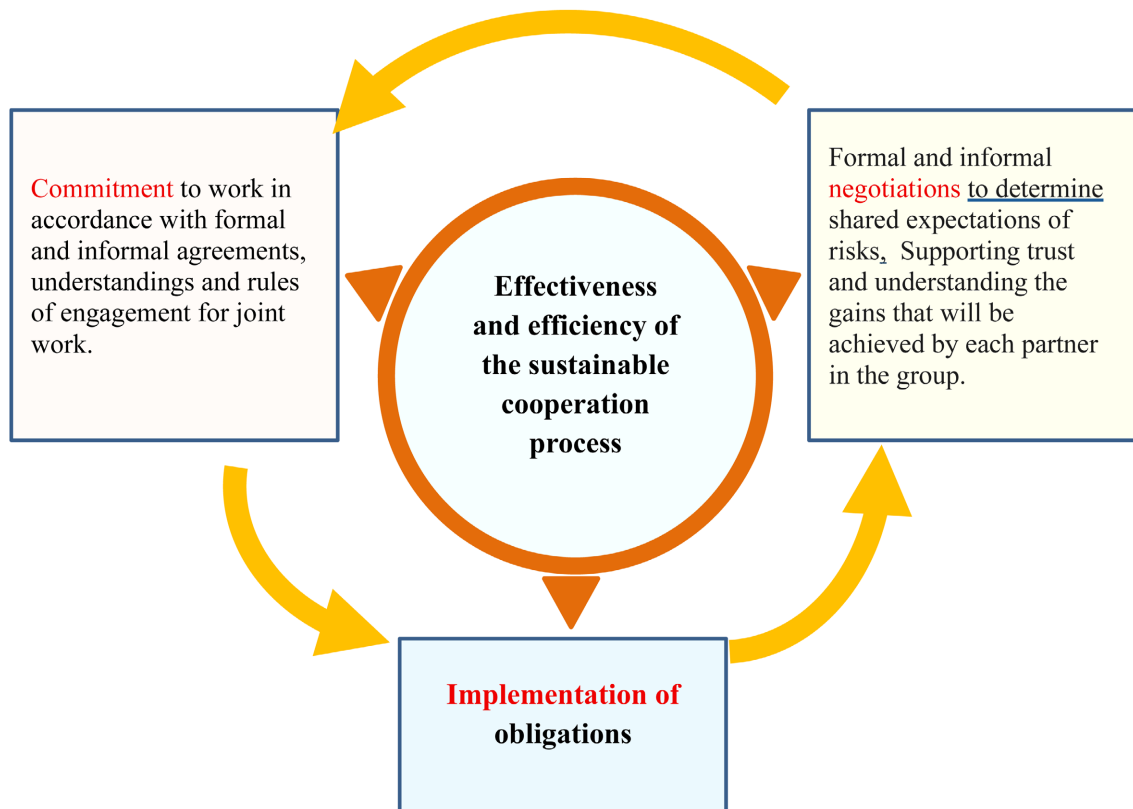
**Figure 2.** The psychological and social context of individual behavior.

Revolution, was a period of coordination and integration in industrial processes that began in 1870 and lasted until the onset of World War I in 1914 (Buxmann & Konig, 2000). Collaboration and coordination among manufacturers over production needs, acknowledging that “cooperation is the cornerstone of the economic exchange system,” as it depends on implementing “adjustments to rectify deficiencies in resource distribution.” Participants, regardless of being producers or consumers, want to “finalize acquisition or consumption activities” (Yue et al., 2006). Collaborative contributions persisted across several firms and groups into the 1960s. In the realm of information technology, first contributions aimed to enhance the deficiencies of certain domains for electronic data interchange. This resulted in a decrease in logistical operating expenses. A decade later, the Internet amplified collaborative behaviors in connecting and integrating its functions, resulting in heightened growth rates of cooperative platforms within e-commerce and electronic data interchange (EDI), which subsequently began offering solutions to facilitate inter-organizational cooperation (Buxmann & Konig, 2000). This collaboration is fundamentally contingent upon the degree of reciprocal trust among the involved parties. Trust is the extent to which the trustee adopts a favorable perspective of the trustee’s integrity and dependability within the collaborative group, as well as the exchange of resources with others. Establishing trust

is a social-psychological process contingent upon the worth of cooperative conduct about justice, equality, communication, and adaptability among the persons involved (Hardin, 1991; Knez & Camerer, 2000). During the 1980s, organizational development facilitated the adoption of contemporary institutional principles and objectives that harmonize the competing interests of diverse social groups by implementing more adaptable concepts to enhance organizational trust, thereby achieving exceptional performance that benefits all societal segments and safeguards their rights across all domains (March & Olsen, 1983). asserts that the interests and advantages of people and society are the primary catalysts for disputes and battles between society and organizations. Consequently, there is a necessity for comprehensive creative policies that aim to acknowledge and honor the interests of all parties through collaborative initiatives, to resolve conflicts via community organizations or any legally empowered entity, possessing the requisite expertise in negotiation, persuasion, and mediation skills. This phenomenon is referred to as the “strategic virtue” of cooperative conduct (Buxmann & Konig, 2000). Numerous policies have been implemented by various governments to address the interests of people, groups, and organizations. These include legal adjudication of rights by administrative agencies or courts, binding or non-binding arbitration, early impartial assessment through adequate hearings, sharing of economic resources, power sharing based on community pluralism, granting ritual practice to ethnic groups, and may even grant regional autonomy that accommodates the interests of all segments of society and solves its problems (Pammer & Killian, 2003). To act on behalf of the central higher authorities in achieving the interests of society with integrity and transparency to a large extent, to build high trust between society and public organizations serving the interests of society and grant it confidence in broad participation in decision-making, even if indirectly (Pammer & Killian, 2003; West et al., 2008).

Practical definitions of collaboration have varied widely across studies, not including social interaction, communication processes, or problem-solving techniques, but rather focusing on work outcomes (Sitaloppi & Ballardini, 2023; West et al., 2008). Organizations, both for-profit and non-profit, collaborate to tackle intricate challenges and seize opportunities by coordinating effective joint efforts to consolidate limited resources and minimize service redundancy, thereby accomplishing objectives unattainable by isolated entities (Gajda, 2004). The success of an organization in cooperation depends on the degree of harmony and compatibility between management and employees, in addition to the existence of positive relationships and communication that enhances the internal environment and improves the efficiency of cooperative performance at the external level. (Abd et al., 2024). As time progressed, interest in fostering collaborative thinking grew, leading some nations to build institutions and centers dedicated to the advancement of collaborative ideas and procedures, The Wellesley Institute for Cooperation in the United States identified three fundamental stages (negotiation, commitment, and implementation) that exemplify the dynamic process of culti-

vating and enhancing sustainable cooperation efficiently and effectively, as depicted in **Figure 3**. The velocity and simplicity of collaboration across stages are influenced by several factors, including the complexity of achieving a particular consensus on the issue or requirement, the variety and heterogeneity of stakeholders and their interrelations, the differing motivations of participants, the capacity for partnership collaboration, the caliber of leadership in engaging participants, and the degree of mutual trust, as stated in the official report of ([Graham & Mollenhauer, 2011](#)).



Source: [Graham & Mollenhauer \(2011\)](#).

**Figure 3.** Stages of development and growth of sustainable cooperation.

The research hypothesis can be formulated as follows: Cooperation based on understanding and communication to distribute and share resources, which contributes to finding creative solutions, and jointly addressing various resource-related challenges, beyond the survival of all and meeting the needs and desires of society, is clearly different from that of public organizations. Interaction with other organizations may contribute to bridging gaps in information, scientific knowledge, resources, and competencies ([Pouwels & Koster, 2017](#)). There are those who assume that many genetic pathways lead to the development of cooperative behavior among individuals, which has a positive impact on the organization ([Kasper et al., 2017](#); [Taborsky & Taborsky, 2015](#)). Collaboration can also generate mistrust, which can lead to destabilizing power struggles between individu-

als, limiting the ability to learn at both the individual and organizational levels (Czernek-Marszałek et al., 2023). However, many studies have proven the accepted hypothesis that cooperation between organizations leads to collaborative innovation and improved performance through the exchange of knowledge and skills and increased ability to learn independently (Najafian & Colabi, 2014; Fındık & Beyhan, 2015).

### **3.3. The Relationship between the Stages of Development of Cooperation between Organizations**

In the biological evolutionary stage of cooperation among living organisms in general, and humans in particular, the origin goes back to the nature of the genetic makeup of the human body, where blood cells called (white blood cells) cooperate to expel any foreign body that enters the bloodstream in order to remain energetic and survive, in addition to the genes responsible for familiarity, closeness, and providing material and moral assistance to others, and being familiar with them and living with them (Axelrod, 1984; Boyd & Richerson, 2009). Experimental and field observations show that adults and children, and even infants in many cases, prefer to care for individuals and learn from them based on indicators of competence, skill, success, and social status (i.e., receiving respect or attention from others), and similarity to the learner in gender and race, in addition to other characteristics, according to the opinion of (Henrich & Muthukrishna, 2021). All of this contributed to the formation of an initial stage of cooperation that provided a fertile environment with a moral motivation to move to the stage of community cooperation. Human gatherings were formed as a family gathering linked by kinship relations in a specific geographical area, governed by customs, traditions and specific cultures. Reciprocity relations emerged between them, i.e., providing voluntary aid and assistance based on previous cooperation between them in order to achieve a specific goal that they see as appropriate for their lives and affairs. This also prompted them to form a clan or tribal council to discuss and consult on the opinion of the future of these human gatherings and to make cooperative decisions in finding solutions to problems and confronting risks and crises. This in itself is considered a more developed organizational trust in community cooperation (Putnam, 1993; Apicella & Silk, 2019). It has become an important part of contemporary organizations that apply the principles of corporate governance, and the participation of the community and its cooperation with organizations, formally or informally, has an important role in enhancing the process of making rational decisions, and has increased the capabilities and capacities of the organization by providing support and assistance in the event of the organization's inability and inability to carry out its tasks and duties towards the community and manage its affairs. However, as a result of the increasing number of organizations and their competition in serving the community at the level of the public and private sectors, these organizations have been prompted to search for similar partners in the work to form a force of human and material capabilities that work

together to achieve common goals. Many organizations have succeeded in developing and growing their resources through cooperation with the community and other organizations. This has helped establish cooperative governance councils to correct the course of production and service operations efficiently and effectively, and develop them in a sustainable manner, according to the opinion of (Agranoff & McGuire, 2003; Rand & Nowak, 2013). Through what has been presented, it becomes clear to researchers that there is a connection between the stages of development of cooperative behavior, starting from the biological makeup of the individual to the formation of human societies and their fusion into organizations that work for survival in the service of humanity and its future aspirations through the system of cooperation in social and economic resources until it reached modern technological cooperation and its most important results, artificial intelligence, and the numerous benefits it provides to partner organizations characterized by accuracy, objectivity, efficiency and effectiveness in the course of organizational operations within the framework of cooperative public administration.

#### **4. Authenticity and Value**

This article, according to the researcher's information, is the first of its kind in collecting the concepts of organizational cooperation and the stages of its development with clear cognitive depth, with reference to the reconsideration of organizations by attracting individuals who are distinguished by their possession of cooperative genes represented by the speed of social integration, originality and insight in knowing what is positive behavior for the interests of the organization, the individual and society, and this results in the future of the organization and its cooperative position towards society and other organizations.

#### **5. Conclusion**

The developmental stages of cooperation have undergone three evolutionary phases, culminating in collaboration among local, regional, and worldwide institutions. This arises from the inherent dynamics of human development, beginning with the embryonic stage, resulting from the interplay of male and female gametes and their biological division, culminating in a human fetus comprised of a collection of organs functioning collaboratively to support life. This fetus can move independently of the mother's body, who was divinely created as the first human in fetal form, subsequently developing into a child that she sustains and nurtures until reaching a stage of consciousness and the capacity to adapt and lead an autonomous life, including self-sufficiency in clothing and sustenance. They then integrate with social members, establishing groupings characterized by varied connections within an environment that is more complicated, ambiguous, and evolving in response to societal demands and aspirations, driven by the ongoing evolution of the natural environment. This has necessitated the formation of organizations comprised of people collaborating within a specialized domain to fulfill societal service and production requirements. As societal demographics and diversity ex-

panded, organizations proliferated and varied in their service and production specialties, resulting in greater complexity. As time progressed, their material and human resources waned, compelling them to seek answers to their challenges. The primary fundamental factors that shaped the emergence and evolution of cooperation, from both practical and theoretical viewpoints, include the genetic heritage of humanity, as elucidated by genetics; the selective processes associated with cultural advancement; and the dynamics of cooperative behavior and community engagement, as examined by social psychologists. Furthermore, the dynamics of collaboration and interaction across organizations and their relation to organizational psychology are examined. All of this fostered scientific and practical endeavors to enhance collaboration in our natural environment. Consequently, collaboration among organizations constitutes a fundamental resource cultivated through the establishment of formal or informal relationships with analogous entities, aimed at attaining reciprocal advantages in mitigating potential risks or addressing deficiencies in human and material resources, thereby ensuring the continuity of activities and production processes of goods and services, the demand for which escalates and diversifies with population growth, particularly in urban centers. This necessitates that service organizations seek a lasting partner aligned with the present and future structure and essence of their operational activities. Furthermore, it requires ongoing employee training in constructive collective behavior, fostering interaction and cohesion within the workplace, leveraging the exchange of experiences and knowledge, and motivating participation in decisions that demand scientific insights and collaborative ideation to attain sustainable success and innovative creativity in delivering products, goods, and services, while broadening their development across the most extensive geographical areas inhabited by citizens. Organizational cooperation also affects the attractiveness of cooperation between employees, society, and other organizations due to its inability to carry out its tasks. Cooperation also enhances the confidence of local and central governments in their activity and opens up horizons for external support and cooperation through local or international organizations. This builds the cooperative behavior of individuals within the organization, which is reflected in its cooperative performance and the quality of its outputs.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- Abd, A. M., Ibrahim, H. K., & Lateef, Y. (2024). *The Impact of Positive Leadership on the Behavior of Difficult Employees: An Analytical Study in the General Directorate of Municipalities of Anbar*.
- Abou Amsha, K., Gronvall, E., & Saad-Sulonen, J. (2023). Emergent Collaborations Outside of Organizational Frameworks: Exploring Relevant Concepts. In A. Wolff, D. Siemon, A. De Liddo, & G. Concilio (Eds.), *Proceedings of the 11th International Conference on Communities and Technologies* (pp. 163-173). ACM.

<https://doi.org/10.1145/3593743.3593778>

- Agranoff, R. (2003). *Collaborative Public Management: New Strategies for Local Governments*. Georgetown University Press. <https://doi.org/10.1353/book13050>
- Almenberg, J., Brooke, J. H., Clayton, P., Curtis, H. D., Dixon, T., Dreber, A., Fisher, J. C., Hall, N., Hauert, C., & Hauser, M. D. (2013). *Evolution, Games, and God: The Principle of Cooperation*. Harvard University Press.
- Apicella, C. L., & Silk, J. B. (2019). The Evolution of Human Cooperation. *Current Biology*, 29, R447-R450. <https://doi.org/10.1016/j.cub.2019.03.036>
- Austin, J. E. (2000). Strategic Collaboration between Nonprofits and Businesses. *Nonprofit and Voluntary Sector Quarterly*, 29, 69-97. <https://doi.org/10.1177/0899764000291s004>
- Axelrod, R. (1984). *The Evolution of Cooperation*. Basic Books. Ink.
- Bengtsson, M., Eriksson, J., & Wincent, J. (2010). Coopetition: New Ideas for a New Paradigm. In S. Yami, S. Castaldo, & G. B. Dagnino (Eds.), *Coopetition*. Edward Elgar Publishing. <https://doi.org/10.4337/9781849807241.00009>
- Bowles, S., & Gintis, H. (2003). Origins of Human Cooperation. In P. Hammerstein (Ed.), *Genetic and Cultural Evolution of Cooperation* (pp. 429-444). The MIT Press. <https://doi.org/10.7551/mitpress/3232.003.0024>
- Boyd, R., & Richerson, P. J. (1992). Punishment Allows the Evolution of Cooperation (or Anything Else) in Sizable Groups. *Ethology and Sociobiology*, 13, 171-195. [https://doi.org/10.1016/0162-3095\(92\)90032-y](https://doi.org/10.1016/0162-3095(92)90032-y)
- Boyd, R., & Richerson, P. J. (2009). Culture and the Evolution of Human Cooperation. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364, 3281-3288. <https://doi.org/10.1098/rstb.2009.0134>
- Buxmann, P., & König, W. (2000). *Inter-Organizational Cooperation with SAP Systems: Perspectives on Logistics and Service Management*. Springer-Verlag. <https://doi.org/10.1007/978-3-662-04218-2>
- Castañer, X., & Oliveira, N. (2020). Collaboration, Coordination, and Cooperation among Organizations: Establishing the Distinctive Meanings of These Terms through a Systematic Literature Review. *Journal of Management*, 46, 965-1001. <https://doi.org/10.1177/0149206320901565>
- Chen, L. (2022). Economic Development Collaboration in Public Administration Research: A Systematic Literature Review. *Chinese Public Administration Review*, 13, 15-28. <https://doi.org/10.1177/15396754221105315>
- Chudek, M., Zhao, W., & Henrich, J. (2013). Culture-Gene Coevolution, Large-Scale Cooperation and the Shaping of Human Social Psychology. In K. Sterelny, R. Joyce, B. Calcott, B. Fraser, & R. Joyce (Eds.), *Cooperation and Its Evolution* (pp. 425-457). The MIT Press.
- Clemmer, T. P., Spuhler, V. J., Berwick, D. M., & Nolan, T. W. (1998). Cooperation: The Foundation of Improvement. *Annals of Internal Medicine*, 128, 1004-1009. [https://doi.org/10.7326/0003-4819-128-12\\_part\\_1-199806150-00008](https://doi.org/10.7326/0003-4819-128-12_part_1-199806150-00008)
- Cross, R., Parker, A., & Borgatti, S. (2000). *Strategic Collaboration: Using Social Network Analysis to Integrate Human Networks*. White Paper.
- Czernek-Marszałek, K., Klimas, P., Juszczak, P., & Wójcik, D. (2023). Social Relationships: The Secret Ingredient of Synergistic Venture Cooperation. In J. J. Ferreira, & P. J. Murphy (Eds.), *Bleeding-Edge Entrepreneurship: Digitalization, Blockchains, Space, the Ocean, and Artificial Intelligence* (pp. 51-90). Emerald Publishing Limited. <https://doi.org/10.1108/s2040-724620230000016005>

- Findik, D., & Beyhan, B. (2015). The Impact of External Collaborations on Firm Innovation Performance: Evidence from Turkey. *Procedia-Social and Behavioral Sciences*, 195, 1425-1434. <https://doi.org/10.1016/j.sbspro.2015.06.439>
- Fowler, J. H., & Christakis, N. A. (2009). Cooperative Behaviour Cascades in Human Social Networks. arXiv:0908.3497.
- Gajda, R. (2004). Utilizing Collaboration Theory to Evaluate Strategic Alliances. *American Journal of Evaluation*, 25, 65-77. <https://doi.org/10.1177/109821400402500105>
- Gao, X. (2025). Facilitating Collaboration with Collaborative Technology: Prerequisites and Evidence from an Explanatory Mixed-Methods Study. *Chinese Public Administration Review*, 16, 28-42. <https://doi.org/10.1177/15396754241309699>
- Gardner, A., & Foster, K. R. (2008). The Evolution and Ecology of Cooperation—History and Concepts. In J. Korb, & J. Heinze (Eds.), *Ecology of Social Evolution* (pp. 1-36). Springer. [https://doi.org/10.1007/978-3-540-75957-7\\_1](https://doi.org/10.1007/978-3-540-75957-7_1)
- Georgé, J., Gleizes, M., & Camps, V. (2011). Cooperation. In G. Di Marzo Serugendo, M. P. Gleizes, & Karageorgos, A. (Eds.), *Self-Organising Software* (pp. 193-226). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-642-17348-6\\_9](https://doi.org/10.1007/978-3-642-17348-6_9)
- Graham, H., & Mollenhauer, L. (2011). *Participating Effectively as a Collaborative Partner: A United Way Toronto Toolkit*. In UWT Partnership Toolkit Team (Eds.), United Way Toronto.
- Hammerstein, P. (2003). *Genetic and Cultural Evolution of Cooperation*. MIT Press. <https://doi.org/10.7551/mitpress/3232.001.0001>
- Harangozó, G., & Zilahy, G. (2015). Cooperation between Business and Non-Governmental Organizations to Promote Sustainable Development. *Journal of Cleaner Production*, 89, 18-31. <https://doi.org/10.1016/j.jclepro.2014.10.092>
- Hardin, R. (1991). Trusting Persons, Trusting Institutions. In R. J. Zeckhauser (Ed.), *Strategy and Choice* (pp. 185-209). MIT Press.
- Head, B. W. (2013). The Collaboration Solution?: Factors for Collaborative Success. In J. O'Flynn, D. Blackman, & J. Halligan (Eds.), *Crossing Boundaries in Public Management and Policy* (pp. 142-157). Routledge.
- Henrich, J., & Henrich, N. (2006). Culture, Evolution and the Puzzle of Human Cooperation. *Cognitive Systems Research*, 7, 220-245. <https://doi.org/10.1016/j.cogsys.2005.11.010>
- Henrich, J., & Muthukrishna, M. (2021). The Origins and Psychology of Human Cooperation. *Annual Review of Psychology*, 72, 207-240. <https://doi.org/10.1146/annurev-psych-081920-042106>
- Huang, C., Wang, Q., & Yi, H. (2025). Understanding Collaborative Water Governance in Local China: The Role of Collaborative Strategy in Shaping Network Structures. *Chinese Public Administration Review*, 16, 89-103. <https://doi.org/10.1177/15396754251327845>
- Ibraheem, H. K., & Mhaibes, H. A. M. (2025). The Effect of Dynamic Capabilities on High Performance: An Analytical Study of Administrative Units in Anbar Governorate. *Journal of Economics and Administrative Sciences*, 31, 1-17. <https://doi.org/10.33095/ybd3bz20>
- Jansen, E., Hocevar, S. P., Rendon, R. G., & Thomas, G. F. (2008). *Interorganizational Collaborative Capacity: Development of a Database to Refine Instrumentation and Explore Patterns*. Acquisition Research Program.
- Jones, C. B., Swedell, E. B. L., Leigh, S. R., & Rasamimanana, H. (2005). *Developments in Primatology: Progress and Prospects*. Springer.
- Kasper, C., Vierbuchen, M., Ernst, U., Fischer, S., Radersma, R., Raulo, A. et al. (2017).

- Genetics and Developmental Biology of Cooperation. *Molecular Ecology*, 26, 4364-4377.
- Khamis, A. M., Kamel, M. S., & Salichs, M. A. (2006). Cooperation: Concepts and General Typology. In 2006 *IEEE International Conference on Systems, Man and Cybernetics* (pp. 1499-1505). IEEE. <https://doi.org/10.1109/icsmc.2006.384929>
- Knez, M., & Camerer, C. (2000). Increasing Cooperation in Prisoner's Dilemmas by Establishing a Precedent of Efficiency in Coordination Games. *Organizational Behavior and Human Decision Processes*, 82, 194-216. <https://doi.org/10.1006/obhd.2000.2882>
- Lurie, Y. (2016). The Ethics of Cooperation in Business. *Open Journal of Philosophy*, 6, 166-175. <https://doi.org/10.4236/ojpp.2016.62015>
- Mankin, D., Cohen, S., & Fitzgerald, S. P. (2004). Developing Complex Collaborations: Basic Principles to Guide Design and Implementation. In M. Beyerlein, D. Johnson, & S. Beyerlein (Eds.), *Complex Collaboration: Building the Capabilities for Working across Boundaries* (pp. 1-26). Emerald Group Publishing Limited. [https://doi.org/10.1016/s1572-0977\(04\)10001-0](https://doi.org/10.1016/s1572-0977(04)10001-0)
- March, J. G., & Olsen, J. P. (1983). The New Institutionalism: Organizational Factors in Political Life. *American Political Science Review*, 78, 734-749. <https://doi.org/10.2307/1961840>
- Marsh, C. (2025). *The Survey Method: The Contribution of Surveys to Sociological Explanation*. Taylor & Francis.
- Najafian, M., & Colabi, A. M. (2014). Inter-Organizational Relationship and Innovation: A Review of Literature. *Global Business and Management Research*, 6, 52.
- Norris-Tirrell, D., & Clay, J. A. (2016). *Strategic Collaboration in Public and Non-Profit Administration: A Practice-Based Approach to Solving Shared Problems*. CRC Press. <https://doi.org/10.4324/9781315087658>
- Nowak, M. A. (2012). Evolving Cooperation. *Journal of Theoretical Biology*, 299, 1-8. <https://doi.org/10.1016/j.jtbi.2012.01.014>
- Olsson, O. (2022). Cooperation between Public Organizations in the Implementation of Spatial Data Infrastructures (SDI)s: A Case Study from Sweden. *Nordic Journal of Surveying and Real Estate Research*, 17, 7-25. <https://doi.org/10.30672/njsr.65571>
- Pammer, W. J., & Killian, J. (2003). *Handbook of Conflict Management*. Wright State University. Dayton, Ohio.
- Pouwels, I., & Koster, F. (2017). Inter-Organizational Cooperation and Organizational Innovativeness. A Comparative Study. *International Journal of Innovation Science*, 9, 184-204. <https://doi.org/10.1108/ijis-01-2017-0003>
- Putnam, R. D. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press. <https://doi.org/10.1515/9781400820740>
- Rahmani, W., Sinha, S., & Biernaskie, J. (2016). Immune Cell-Stem Cell Cooperation. In *The Hawaii International Conference on System Sciences (HICSS)* (pp. 898-907).
- Rand, D. G., & Nowak, M. A. (2013). Human Cooperation. *Trends in Cognitive Sciences*, 17, 413-425. <https://doi.org/10.1016/j.tics.2013.06.003>
- Randrup, N., Druckenmiller, D., & Briggs, R. O. (2018). Toward a Philosophy of Collaboration. *International Journal of e-Collaboration*, 14, 19-36. <https://doi.org/10.4018/ijec.2018040102>
- Salih, M. A. & Salih, R. M. (2021). The Impact of Paternalistic Leadership Practices on the Employees' Voice Behavior. *Academy of Strategic Management Journal*, 20, 1-21.
- Sitaloppi, J., & Ballardini, R. M. (2023). Promoting Systemic Collaboration for Sustainable Innovation through Intellectual Property Rights. *Journal of Co-Operative Organization*

- and Management*, 11, Article 100200. <https://doi.org/10.1016/j.jcom.2023.100200>
- Silvestre, H. C., Marques, R. C., & Gomes, R. C. (2018). Joined-Up Government of Utilities: A Meta-Review on a Public-Public Partnership and Inter-Municipal Cooperation in the Water and Wastewater Industries. *Public Management Review*, 20, 607-631. <https://doi.org/10.1080/14719037.2017.1363906>
- Taborsky, M., & Taborsky, B. (2015). Evolution of Genetic and Physiological Mechanisms of Cooperative Behaviour. *Current Opinion in Behavioral Sciences*, 6, 132-138. <https://doi.org/10.1016/j.cobeha.2015.11.001>
- Unit, W. E. C. S. (2000). Stakeholder Collaboration: Building Bridges for Conservation. *The Collaboration Process*, 5-3.
- West, M. A., Tjosvold, D., & Smith, K. G. (2008). *International Handbook of Organizational Teamwork and Cooperative Working*. John Wiley & Sons.
- Wood, D. J., & Gray, B. (1991). Toward a Comprehensive Theory of Collaboration. *The Journal of Applied Behavioral Science*, 27, 139-162. <https://doi.org/10.1177/0021886391272001>
- Yue, J., Austin, J., Wang, M., & Huang, Z. (2006). Coordination of Cooperative Advertising in a Two-Level Supply Chain When Manufacturer Offers Discount. *European Journal of Operational Research*, 168, 65-85. <https://doi.org/10.1016/j.ejor.2004.05.005>